



PREVENT STORM WATER CONTAMINATION

Best Management Practices for

Section S - Vehicle Maintenance, Equipment Cleaning, or Deicing at Air Transportation Facilities



SIC Codes: 4510 - 4581

General Information:

1) Federal and State Storm Water regulations require the City to reduce the quantity of pollutants that enter our storm drains, rivers and washes from rainwater and other sources. 2) Water from any source that contains contaminants is prohibited from entering the storm drain system which includes streets, catch basins (street grates), ditches, washes and rivers. 3) Commercial and industrial wash or wastewater is prohibited from entering the storm drain system, street or any other outside area. 4) You may request a temporary discharge permit by calling Storm Water Management at 256-3190 prior to discharging. Restrictions apply. 5) All washing activities that use soap, solvents, degreasers or any other chemicals must be hauled to a landfill or discharged into the sanitary sewer through a sand/oil interceptor or approved pretreatment device. 6) City Ordinance requires all commercial and industrial facilities to develop and implement a Storm Water Management Plan (SWMP). 7) See 40CFR122 Section 6.N.6, October 30, 2000 for additional required BMPs.

Aircraft, ground Vehicle and equipment maintenance areas (including aircraft service areas)

- ◆ Perform all maintenance activities indoors.
- ◆ Maintain an organized inventory of all materials used.
- ◆ Drain all parts of fluids before disposal.
- ◆ Prohibit hosing down the aprons and hanger floor.
- ◆ Use dry clean-up methods for spills.
- ◆ Recycle materials if practicable.
- ◆ Collect and treat storm water before discharging.

Aircraft, ground Vehicle and equipment cleaning areas

- ◆ Perform all cleaning operations indoors.
- ◆ Collect storm water and provide treatment.

Aircraft, ground Vehicle and equipment storage areas

- ◆ Store aircraft or equipment waiting for repairs indoors.
- ◆ Use drip pans to collect leaking fluids.
- ◆ Perimeter drains, dikes or berms should be considered.

Material storage areas

- ◆ Store waste materials indoors in a centralized area.
- ◆ Install berms and curbs around outside storage areas

Airport fueling system and fueling areas

- ◆ All BMPs shall be consistent with 40CFR 112.7 concerning the SPCC plan.
- ◆ Use spill and overflow protection.
- ◆ Minimize run-on of storm water into the fueling area by grading the area such that storm water only runs off.
- ◆ Reduce exposure of the fuel area to storm water by covering the area.
- ◆ Use dry clean-up methods for fuel area rather than hosing the fuel area down.
- ◆ Use proper petroleum spill control.

- ◆ Perform preventive maintenance on storage tanks to detect potential leaks before they occur.
- ◆ Inspect the fueling area to detect problems before they occur.
- ◆ Train employees on proper fueling techniques.

Source reduction

- ◆ If the airport has a taxi-way, ramp or runway, develop methods that will reduce the amount of deicing chemicals used.
- ◆ Evaluate the current deicing procedure and look at alternative methods.
- ◆ Consider using devices that can measure the amount of chemicals used.
- ◆ Evaluate current runway procedures to ensure against using excessive amounts of deicing chemicals.
- ◆ Consider adding a runway ice detection system (RID) to monitor runway temperatures.
- ◆ Consider using Potassium Acetate instead of Ethylene Glycol for deicing.

Management of run-off

- ◆ Operators should block all storm drain inlets during deicing procedures.
- ◆ Mechanical vacuum systems should be installed to collect contaminants before they enter the storm drain.
- ◆ Designate an area to deice all vehicles.
- ◆ Collect and recycle all used deicing chemicals.

Disposal of chemicals

- ◆ Direct run-off or used deicing chemicals to the sanitary sewer for treatment.
- ◆ Direct run-off with deicing chemicals to retention ponds with continuous aeration and sufficient capacity.
- ◆ Collect and recycle used Ethylene Glycol.



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Continue

Training

- ◆ All employees should be trained in the following areas at least once per year.
 - ◆ Spill response
 - ◆ Good housekeeping
 - ◆ Material management practices
 - ◆ Procedures for equipment and container washing.

Inspections

- ◆ A qualified person shall inspect all deicing equipment and areas during deicing operational periods at least weekly in addition to other inspections.
- ◆ Conduct routine monthly storm water inspections and during wet weather within 24 hours of the event.
- ◆ Inspect the following areas at least on a quarterly basis:
 - ◆ Spill prevention.
 - ◆ Good housekeeping practices.
 - ◆ Management of process waste products.
 - ◆ All structural and non-structural BMPs.
 - ◆ Complete the BMP checklist during each inspection.
 - ◆ All areas exposed to precipitation will be visually inspected for evidence of or the potential for pollutants entering the storm drain system.
 - ◆ Structural BMPs (berms and dikes) will be inspected to ensure they are operating correctly.
- ◆ Complete the BMP checklist during each inspection and maintain the records for at least three years.

Storm Water Management Plan (SWMP) or Storm Water Pollution Prevention Plan (SWPPP)

- ◆ Develop and implement a SWMP or SWPPP.
- ◆ All Storm Water Plans (SWMP or SWPPP) must be submitted to the city for approval.
- ◆ SIC codes in this class must submit an industrial Notice of Intent (NOI) to ADEQ.

If spills occur

- ◆ **Stop the source of the spill immediately.**
- ◆ **Contain the liquid until cleanup is complete.**
- ◆ **Deploy oil containment booms if the spill may reach water or a storm drain.**
- ◆ **Cover the spill with absorbent material.**
- ◆ **Keep the area well ventilated.**
- ◆ **Dispose of clean-up materials properly.**
- ◆ **Do not use an emulsifier or dispersant.**

The BMPs found on this page are paraphrased from Federal Storm Water documents 40CFR122, 1995 or later.

Storm Water



Management
A member of STORM
STormwater Outreach for
Regional Municipalities

Only Rain in the Storm Drain!

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City of Phoenix

STREET TRANSPORTATION DEPARTMENT
STORM WATER MANAGEMENT SECTION

Upon request, the Street Transportation Department will make this publication available through appropriate auxiliary aids or services to accommodate an individual with a disability by calling 602-256-3190; or faxing a request to 602-495-2016.